


Your kids should consider petroleum engineering

*Westhill Consulting Career & Employment
Australia is an information based website
for expats who wish to work in Southeast
Asia and the world.*




Encouraged by some of the highest starting salaries available in any industry, record numbers of students are enrolling in petroleum engineering courses at U.S. universities.

In the future, Southeast Asian countries such as Singapore, Jakarta Indonesia and many more are amongst with many developing countries in the oil and gas industry. It is part of a broader renaissance in engineering education, which should eventually ease severe skill shortages in the oil and gas sector. But it will be the end of the decade before these new graduates are the experienced professionals needed to lead teams and make a real difference to exploration, output and refining.

Opportunities: [Oil and Gas Industries](#), [WCE Blog](#)


In 2010, 1,295 graduate students enrolled in petroleum engineering courses at U.S. universities, according to the U.S. Department of Education's "Digest of Education Statistics". Enrollment had risen 60% in the previous four years and was virtually double the level at the start of the decade, when just 627 students signed up to study engineering courses geared to the oil and gas industry. Only enrollment



in biomedical engineering has grown faster over the last decade.

Enrollments have almost certainly risen further in 2011, 2012 and 2013, but the exact numbers will only be available in future versions of the Digest. Soaring interest in petro-engineering, and related disciplines such as metallurgical and materials science, geosciences and mining engineering, is part of a broader upsurge in interest in science, mathematics, engineering and technology (SMET) degrees driven by a strong demand from employers.

Enrollments in graduate engineering courses rose by 43 percent between 2000 and 2010, from 104,000 to 149,000 students per year. Graduates with just a bachelors degree in engineering could expect to start on a salary of over US\$60,000 in 2012, putting them marginally ahead of those with a bachelors' degree in computer science, and far ahead of graduates in communications and journalism (US\$42,200) or the humanities and social sciences (US\$37,000), according to the National Association of Colleges and Employers annual salary survey.



The 30,000 practising petroleum engineers in the United States made a better average salary (US\$147,000) than the country's half million lawyers (US\$131,000) in 2012. Petroleum engineers working in oil and gas extraction averaged more than US\$150,000. Only chief executives (US\$177,000), dentists (US\$161,000 to US\$216,000) and doctors specialising in anaesthesiology and surgery (US\$200,000 to US\$230,000) earned more, according to the Bureau of Labor Statistics' (BLS) annual survey on Occupational Employment and Wages.

While journalists' salaries have risen just 1.4% per year for the last decade, and plumbers and lawyers have not done much better, averaging annual increases of 1.9% and 2.1% respectively, petroleum engineers have seen their salaries rise on average by more than 5.6% each year since 2002, according to BLS. No complaints there.

The oil and gas industry has historically been subject to long and deep cycles.

Strong hiring and big salary increases are gradually reversing the severe skill shortage and ageing of the industry

workforce in the wake of mass layoffs during the period of depressed oil prices in the 1990s.

But if new graduates need 10-15 years of experience before they can start to assume leadership positions, the industry's job market looks set to remain tight until the end of the decade.

